## AMENDMENTS TO THE SPECIFICATION

Please amend the 9<sup>th</sup> paragraph on page 9 as follows:

Fig 2 is schematic diagram of another conventional Axial tread reactor (10) having one entry of the combustion gases (14). Fuel is injected through fuel inlet at one end (11). A stream of air in is injected through an inlet (13) and the feedstock is injected into chamber (16) through ports (15).

Please amend the page bridging pages 9 and 10 as follows:

Reaction products are processed through a reaction chamber (17) and to a quench chamber (18) and quenched with water <u>entering through ports (12)</u>. End product is collected through ports (19) and converted to conventional pelletizing system to obtain pellets, which are dried and packed.

Please amend the 3<sup>rd</sup> and 4<sup>th</sup> paragraphs on page 13 as follows:

Fig 8 is end view of the skewed flame (80) produced by the arrangement shown in Fig 7 wherein flame is expected to skew because vortices will rotate at different phase angles.

For a given Axial velocity when the two inlet velocities forming the helices (A & B) are not equal an entirely different results will be produced. Fig 9 show visualized representation of this <u>skewed</u> arrangement (90). The tangentially entering combustion gases are the vortex sources. In this figure the combination of the Axial velocity 93, Tangential velocity 94, and radial velocity 95 lead to final axial velocity 99. They will form a "Double Helix " 91 and 92 by the inner diameter of the reactor. In this case helices caused by inlets A & B are not equal.

## Please amend the 2<sup>nd</sup> full paragraph on page 14 as follows:

Air in injected from the main line (122) to orifice flow meter (123) to plug type control valve (124) to air pre-heater (124) (125). Hot air is then directed to three Annubar (averaging pilot tube) (126, 127 and 127A). For injecting air axially, hot air from Annubar (125) (126) is directed to butterfly control valve (128) to axial injection inlet (42). For injection of air tangentially, hot air from Annubars (126 127, 127A) is directed to butterfly control valves (129, 130) to tangential inlets (44, 43) respectively.